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AGO D/A ltr, 29 Apr 1980

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DEPARTMENT OF THE ARMY
OFFICE OF THE ADJUTANT GENERAL
WASHINGTON, D.C. 20310

IN REPLY REFER TO

AD 869534

AGDA (M) (20 May 70) FOR OT UT 701158 22 May 1970
SUBJECT: Operational Report - Lessons Learned, Headquarters, 815th Engineer Battalion, Period Ending 31 January 1970

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2. Information contained in this report is provided to insure appropriate benefits in the future from lessons learned during current operations and may be adapted for use in developing training material.

BY ORDER OF THE SECRETARY OF THE ARMY:

Kenneth G. Wickham

KENNETH G. WICKHAM
Major General, USA
The Adjutant General

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DEPARTMENT OF THE ARMY
HEADQUARTERS, 815TH ENGINEER BATTALION (CONSTRUCTION)
APO San Francisco 96318

EGCE-OP

31 January 1970

SUBJECT: Operational Report - Lessons Learned for the 815th Engineer
Battalion (Construction), Period Ending 31 January 1970, RCS
CSFOR - 65 (R2).

THRU: Commanding Officer
937th Engr Gp (C)
APO 96318

Commanding General
18th Engineer Brigade
ATTN: AVBC-C
APO 96377

Commanding General
United States Army, Vietnam
ATTN: AVHCC-DST

Commander in Chief
United States Army, Vietnam
ATTN: GPOF-DT

TO: Assistant Chief of Staff for Force Development
Department of the Army (ACSFOR-DA)
Washington, D.C. 20310

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31 January 1970

SUBJECT: Operational Report - Lessons Learned for the 815th Engr Bn
(Const) Period Ending 31 Jan 70, RCS CSFOR - 65 (R2)

Section I, Operations: Significant Activities

1. Personnel Administration, Morale and Discipline:

a. Personnel: The average present for duty strength of the battalion and its units remained within the range of 89.6 per cent and 92.6 per cent with an average of 91.1 per cent. At the present time this battalion is employing 100 per cent of the local nationals authorized by TDA.

b. Administration: The following procedures have been incorporated into the orientation of newly assigned personnel during the in-processing conducted by the personnel section. The impact of these procedures will be evaluated during the next period from statistics compiled on a monthly basis.

(1) The Army savings programs are fully explained to include Savings Bonds, Freedom Shares, and particular emphasis on Soldiers Savings Deposits because of the comparative high rate of interest of 10 per cent paid on savings deposited. Allotment forms are now prepared during in-processing for individuals desiring to participate in the Savings Bond Program.

(2) Home Town News Releases, DA 1526, are prepared during in-processing, upon promotion of individuals, presentation of decorations and awards, and results of reenlistments to ensure the submission and acceptance of the releases for publication. Releases which are required to be forwarded to individual units for completion and returned for submission are suspended to ensure control.

(3) Drug suppression orientations are given to all newly assigned personnel to make them immediately aware of the types, effects, availability, and methods of introduction of drugs to servicemen stationed in the Republic of Vietnam.

(4) A weapons safety orientation is given to all newly assigned personnel consisting of basic safety measures such as: (1) While on post or in a secure area there will be no magazines in weapons, no round chambered, and weapons will be cleared when entering; (2) While on the road or sentinel duty a magazine will be inserted in weapon, no round chambered, and weapons will be cleared when leaving the guard tower or entering a secure area. This procedure is to ensure individuals are immediately made aware of the Battalion's weapons safety program and to prevent accidents while handling weapons in an in-transit status enroute to the ultimate unit of assignment.

c. Morale and Discipline:

(1) Morale slipped slightly early in the period especially at Woolly Bully Too compound. This was alleviated with the expansion and improvement of the EM/NCO club in Woolly Bully Too Compound. Improvement of the defensive posture at Woolly Bully Too also increased morale during the period.

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(2) Disciplinary problems were largely limited to off-limits violations, sleeping on guard, and failure to repair. During the report period there were no summary courts-martials and four special courts-martials.

(3) There was a total of 108 religious services conducted by assigned chaplains during the report period. Attendance was 1600. Thirty-eight character guidance classes were conducted with an attendance of 2391. The assigned chaplains counseled 140 members of the battalion on matters dealing with personal, morale, religious, and family problems. Visits by the chaplain and the chain of command to the 71st Evacuation Hospital were made according to the need/or number of unit personnel hospitalized. Chapel offerings during this report period were received for the 71st Evacuation Hospital to assist in the purchase of prosthetic devices, a Montagnard School project at Phu Thien, the Evangelical Clinic of Pleiku, and the Pleiku Leprosarium. The assigned chaplain regularly visited elements of the battalion located in outlying districts. Battalion personnel working in the Kontum area were provided with catholic services by an ARVN chaplain. Regular visits to the work sites and company areas allowed the chaplain to personally contact individual members of the battalion. Through this contact the chaplain is able to assist the commander in the fulfillment of his responsibility for the morale and welfare of assigned personnel.

2. During this report period the battalion completed a wide variety of projects. Two EM billets were completed on Engineer Hill and turned over to the 330th Radio Research Company. At Camp Holloway, one BOQ shower and three latrines have been completed while the power distribution work at the BOQ area is all but finished, pending the correction of several electrical deficiencies. Also, two showers and four latrines were installed at the Woolly Bully Too and 57th Aviation Company compounds at Kontum. The task of upgrading the Kontum Airfield in support of the 57th Aviation Company was completed during the period. Work consisted of upgrading the storage areas and refueling hardstands, and the replacement of old M8A1 matting with ninety-eight new sheets. The battalion had two well drilling teams in operation during the period which accounted for a great deal of drilling activity. MACV Get Well projects were completed during the period at Dak To and Phu Tuc, while another well was drilled at the new POW Compound at Cheo Reo. An existing well at Phu Nhon was drilled deeper and screened in order to increase the capacity of the well. In addition, two wells were drilled on Engineer Hill in order to make the ice plant and swimming pool self-sufficient facilities. The swimming pool well was completed except for final plumbing connections, and the ice plant well is awaiting plumbing connections by PA&E, who is responsible for the operation of the facility. The battalion is currently drilling a well for the 173rd Airborne Brigade at LZ English. An open-sided class I storage building was erected in Kontum on an existing 30' X 70' pad. This area is presently being used as a central distribution point for all units located in the Kontum area. Seven bunkers and three towers along the Engineer Hill perimeter were completed during the period. Also, the perimeter was improved to include out-ting drainage ditches along the road, placing culvert under the road and the wire, building new intermediate firing positions, and installing approximately 1200 meters of triple concertina, 900 meters of double concertina, and 1000 meters of tanglefoot along a new section. The upgrade of the old section of

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perimeter wire will continue in order to improve overall tactical security. Operational Support was given to the 24th STZ Advisory team at the Dak To Airfield with the construction of a 50' X 60' X 4' berm for a fuel bladder. Also, at a later date a new 120,000 Sq. Ft. refueling area was completed to include grading and prime coating, and the razing of existing bunkers and fences. The ARVN training and affiliation program continues to improve. Training included instruction and practical work on the 20 ton crane, 40 ton crane, D7E dozer, scooploader, and asphalt plant operations for a total of 31 soldiers.

3. Many projects at various stages of completion continue to be suspended due to the USARV hold on vertical construction. These projects include three maintenance buildings at Camp Schmidt, EM billets and one BOQ at Camp Holloway, a tire shop and a maintenance storage building at Log Depot, and the electrical upgrade at Camp Enari. Final completion of the 604th maintenance hanger at Camp Holloway continues to be held up due to a lack of construction materials. The construction of revetments at the 71st Evacuation Hospital has been turned over to the 20th Engineer Battalion for final completion, and the repair of Hensel Army Airfield at Camp Enari was cancelled during the period. The control tower at the Kontum Airfield is presently being remodeled to include construction of a new roof, placement of interior insulation, installation of a new lighting system for better visibility and installation of air conditioning. During the report period, the industrial complex at Woolly Bully Too to include asphalt, crusher, and cold mix operations was further developed and upgraded in order to meet the vast requirements of the LOC mission. Also the quarry adjacent to the Woolly Bully Too compound was further developed during the period, thereby increasing the rock production necessary for the successful operation of the industrial complex. The assembly of the Cedar Rapids Soil Stabilization Plant was completed to include debarreling racks, hot oil heater, melter, hot storage tanks, generator, and conveyors. However, work constantly continues on the plant due to necessary repairs and changes. The unit, operating with 1½(-) base coarse and MC-800 cutback is currently producing sufficient cold mix base material for QL-14N. New generator pads and sheds were built for the soil stabilization plant and asphalt plants in an area less susceptible to dust from the crusher and asphalt operations. The compound haul roads at Woolly Bully Too were improved both as a training exercise for our paving machine operators and to control the chronic dust problem by paving the major roads with asphalt, coating minor roads with prime coat, and paving the convoy staging area. Drainage was further improved at the entire crusher site by the removal of 4,000 CY's of mud, and the addition of 2,500 CY's of fill. The upgrade of base camp security continued at Woolly Bully Too with the addition of perimeter berms, the installation of eight living/fighting bunkers, the improvement of perimeter wire and lighting, and clearing fields of fire. To date, over 700 yards of chain link fence have been placed around the compound for additional security. Also, tactical security was improved at the 57th Aviation Compound in Kontum and the CIA Yard in Pleiku. Due to the location of earth-moving elements at Vo Dihn, tactical security was upgraded at this artillery base to include placing of barbed wire fencing, sandbagging for bunker revetments, and installing a living/fighting bunker. On Engineer Hill, the battalion is upgrading and maintaining its electrical facilities. Villages along QL-14N are occasionally given rejected asphaltic concrete for their own use and several loads of rock have been made available to worthy civilian projects.

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4. The battalion's LOC construction effort strode into full swing during the report period with the upgrading of QL-14N (Pleiku-Kontum-Tan Canh) to CENCOM standards (class C modified). Work accomplished to date includes the over-paving of both lanes of roadway, 6.5 KM, between Woolly Bully Too and the southern city limits of Kontum. Earthwork north of Kontum involved the ripping, shaping and compacting of 26 KM of roadway. In addition, over 100,000 CY's of fill was hauled, compacted, and shaped, for the travelled way and shoulders. Also, a great deal of effort was expended in placing culverts, building head-walls, and constructing check dams to prevent erosion. Drainage improvement also included upgrading and cutting drainage ditches, and the construction of drainage diversion ditches. In order to facilitate traffic during the construction period, bypasses were completed for bridges 14/26 and 14/38. Bridge 14/38 was replaced with a three barrel 48 inch culvert. Presently the battalion is paving the west lane from Kontum to Dak To, with a laydown to date of 30.2 KM of 12 feet wide single lane pavement, using 18,379 tons of asphalt. At the beginning of the period, base coarse construction on QL-14N proceeded with the use of a 6 inch crushed rock base. However, upon completion of the Soil Stabilization Plant, cold mix base material was used instead, and much superior results were apparent. Some of the advantages of the cold mix include: a 33 percent reduction in the total rock requirement, less wastage, the elimination of water haul, easier compaction, and greater protection from VC mining activity. The cold mix operation was in high gear by the middle of the period, with a total production exceeding 46,000 CY's. On QL-14N, the battalion spread 41,132 tons of cold mix on 24.5 KM of road and shoulder surfaces. The maintenance of tactical roads in the 24th STZ AOR continued during the period as did maintenance work on the Pleiku Bypass which included preparing and patching 10,000 sq. ft. of roadway with 434 tons of asphalt. In addition, 2,300 sq. ft. of roadway were prepared and patched with 285 tons of asphalt between Pleiku and Kontum, and 150 potholes were filled with 300 tons of asphalt between Kontum and Dak To. To accomplish all of these projects 112,360 CY's of rock were crushed at Webb Quarry and 23,287 tons of asphalt were produced at the CIA Yard. Much of the asphalt was either used for various projects in the Pleiku area or used for the paving operations on QL-14N. Asphalt haul convoys carried asphalt almost daily from the CIA Yard in order to keep pace with the fast moving requirements of the paving train on QL-14N. The two crushers and the asphalt plant at Woolly Bully Too increased their production output during the period, producing 65,375 CY's of rock and 14,933 tons of asphalt. The battalion's sand pit operation at Kontum dredged and loaded 25,219 CY's of sand in support of the LOC Mission, and for the operational support of US and ARVN units in the Kontum area. Enemy mining activity hampered road construction on QL-14N at various times during the period. These incidents resulted in a loss of nine important pieces of equipment and the infliction of wounds on sixteen engineer troops.

Because of the lack of air filters for the 500 KW generator which powers the 250 TPH crusher at Woolly Bully Too, and late seasonal rains early in the period, the battalion was forced to revise its construction schedule on QL-14N. However, the construction effort is currently going well and the battalion expects to complete its mission before the end of the next report period.

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5. Inclosure 1 gives a list of all units assigned, attached, and under operational control of this unit during the report period. During the reporting period the 815th Engineer Battalion and its attached units were engaged in 6.5 days of training, 6.5 days of maintenance, 0 days of troop movements and 77.5 days of normal operations. Also, the battalion engaged in 1.5 days of stand-down due to the Christmas and New Year Holidays. Sunday was devoted primarily to training and a closely supervised, concentrated maintenance program except where major plant repairs during the work required a normal work day schedule. Maintenance was constantly emphasized because of the present rapid pace of daily operations.

6. MCA Equipment: There are currently fifty-five pieces of MCA equipment in the battalion. The following problem areas were encountered during this report period:

a. Parts: The resupply of vital repair parts continues to be a problem. The response time from the time a part is ordered until it arrives continues to be excessive. More command emphasis is needed in order to have these parts shipped by air.

b. Training: The training of operators for MCA equipment has improved to the point that it is no longer a major problem.

c. Personnel: The MCA personnel working for the battalion are currently located at two work sites, Engineer Hill and Woolly Bully Too. Although each of the sites has a site foreman, there is no central control over these personnel. The Pleiku MCA foreman continues to be only marginally effective.

d. Operators: Operators for MCA equipment have to be well trained and highly motivated because of the complexity of these vehicles and equipment. The inaccessibility of parts and the inability to interchange TO&E and MCA equipment, requires even more emphasis on preventive maintenance.

TO&E Equipment: This battalion is only short a few major items of construction equipment to include six 10 ton tractors and seventeen 5 ton dumps. Much of this equipment is old and is being turned in for salvage. The mounting shortage of 5 ton dumps is approaching a point where the shortage may inhibit its mission. In the past the attached units, 585th and 509th, have been able to take up the slack but they can no longer continue to do so because of a growing shortage of trucks in their units, i.e., sixteen 5 ton dumps. Other problems worthy of note include:

a. Parts: Weekly up to twenty-five pieces of equipment are down waiting for parts. Setting up our own MRE team at our supporting depot in Qui Nhon for our ASL should provide a more accurate and steady supply of repair parts.

b. Operators: The battalion is currently short 148 personnel while there are fifty-five pieces of MCA equipment on hand in addition to our authorized TO&E equipment. Therefore, many sections and companies have to make extensive use of local nationals to complete their mission. The training program for local nationals continues with a great deal of success.

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7. The amount of material received by the Class IV (CIA) Yard of the 815th Engineer Battalion (Construction) during this report period was again drastically reduced due to the suspension of nearly all vertical construction. Critical shortages of 1X and 2X materials prevent even the smallest of projects to be completed and this also holds true for corrugated roofing. During this report period the Class IV (CIA) Yard was inventoried two times with excess supply lists sent to all units within the 937th Engr Group. The various battalions have made good use of these lists and have reduced our stocks greatly in such areas as lumber, sand bags, M8A1 matting, and plumbing supplies. This battalion continues to cancel outstanding requisitions of non-essential items to further reduce its inventory. Also, materials excess to the present or projected needs of the battalion are constantly being hauled back to Qui Nhon Depot C & E yard for proper disposition.

8. During the report period the civic action team implemented Phase I, II, and III of the Psychological Warfare Program outlined in the Battalion's LOC OPLAN (12-69). In this respect the team hired a total of 125 local nationals for the battalion LOC mission. These people were paid through AIK funds. They live in Kontum, Xa Vo Dinh, Kon Horing and Tan Canh thus aiding a wide geographical area economically. The civic action team also conducted a total of thirteen MEDCAPS treating an estimated 500 people. A child suffering from polio was admitted to the 71st Evac Hospital. Three safety lectures were given to Montagnards in the vicinity of Woolly Bully Too and five hygiene classes were given at Xa Vo Dinh and Kon Horing. Also in the health aspect, the team donated 1200 sq. ft. of polyethylene to the Kontum Province Hospital for use in a dust free treatment room. Finally, 460 lbs. of sugar and an indeterminate amount of candy, cigarettes, and soap were distributed to needy villages. As for physical improvements, the battalion improved 1.2 KM of secondary road in the village of Xa Vo Dinh, which as a result of improper drainage and road crown, was normally impassable during the monsoon season. Two agricultural tool kits and five axes were given to the Kontum Refugee Village to aid in agricultural production and construction of defensive barriers. The team also provided twenty-four CY's of excess rock and 100 lbs. of cement to the Kontum Refugee Village for use in the construction of a rice cleaning pad. To date the forms have been completed and actual laying of the cement will begin shortly. Finally the team dropped a total of 400,000 leaflets between Kontum and Dak To as a part of the PSYWAR Program to assist in the paving of QL-14N. Leaflet subjects included: Introductory Type, Equipment Safety, Voluntary Informant Program (mines), and Chiou Hoi leaflets. The team also co-ordinated with village and district officials for the removing of fences in the villages of Tan Canh, Dien Bien, and Tri Dao. It was found that the presence of a government official at the removal site is highly desirable. All materials in any of the civic action projects were either donated or excess.

Section II, Lessons Learned: Commander's Observations, Evaluations, and Recommendations:

A. Personnel: None

B. Intelligence: None

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C. Operations:

1. Loading of explosives in Quarry bore holes:

a. Observation: Explosives in military quarries are generally loaded incorrectly. Also, a military powderman has a tendency to tamp, with rock fragments, only the top one foot of a loaded borehole.

b. Evaluation: The sticks of dynamite are broken open, poured into the borehole and tamped. This results in a variable detonation velocity of the explosive and unreliable blast results due to uneven compaction of the dynamite.

c. Recommendation: Dynamite should be loaded into boreholes as received, without breaking open the sticks. For a three inch borehole, three sticks may be taped together in a triangular fashion. As for tamping, a more acceptable procedure requires that the stemming material in the top be loosely poured into the hole. Also, the amount of stemming material should be from $1\frac{1}{2}$ to 1 times the distance between rows in feet. Correct loading procedures will further result in an improved quarry product and less crusher wear and tear.

2. Operator Health Hazard:

a. Observation: Because of prevailing winds at the Woolly Bully Too Compound, rock dust is blown into both the operator's face and the remote control panel of the 250 TPH Cedar Rapids Crusher.

b. Evaluation: The Cedar Rapids 250 TPH crusher is equipped by the factory with an operator's platform on only one side of the vibrating screen unit. Therefore, the position of the operator is limited to one area during the operation of the crusher.

c. Recommendation: To eliminate this safety hazard a similar platform was constructed from scrap angle iron and $1/8$ in. sheet metal, and was placed on the opposite side of the screen unit. In addition, a crossover catwalk was constructed over the screen unit connecting both operators' platforms. The catwalk places the operator in a position where he can observe and operate the crusher from a dust free position.

3. Broken D9G end-bit and cutting edge bolts:

a. Observation: D9G's, especially the MCA type with the wide blade, broke an excessive number of cutting edge and end-bit bolts while being used in hard rock quarry operations.

b. Evaluation: The breaking of the end-bit bolts often resulted in the subsequent loss of the end-bit itself and deadlined the dozer until a replacement could be secured.

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c. Recommendation: It was found that inspecting and retightening all cutting edge and end-bit bolts not only at motor stables but periodically throughout the day while in the quarry, significantly reduced the number of broken bolts and lost end-bits. Apparently, when one or two holes work loose the added strain on the remaining ones promotes rapid loosening and resultant breakage and possible loss of the cutting edge or end-bit. Frequently checking not only the cutting edge and end-bit bolts but all major carriage and frame mounting bolts is a must during hard rock quarry operations due to the tremendous loads and strains placed on these parts of the dozer.

4. A method of laying down cold mix:

a. Observation: The recommended method of placing and compacting cold mix required three different rollers and a road grader.

b. Evaluation: This method was slow and, in addition, rollers were at a premium. It was essential to the mission that the cold mix operation keep ahead of the paving train which was following right behind.

c. Recommendation: It was found that a Jersey Spreader attachment pushed by a D-7 dozer could lay down cold mix in widths from four to six feet as fast as trucks could haul it to the job site. Also, it was found that one 10 ton Rayco Roller (vibratory) could roll, compact, and finish the roadway in one operation, thus saving equipment and manhours. The Rayco-roller is exceptionally valuable in compacting potholes also.

5. Culvert placement:

a. Observation: Culvert needed for proper drainage was placed underneath the perimeter wire to prevent serious erosion, this improving the effectiveness of the wire.

b. Evaluation: The entire project of removing the old concertina, digging the ditch, placing the culvert and closing the wire must be accomplished in one day to insure maximum security.

c. Recommendation: In order to expedite ditching operations, the use of a 290 created a sufficient aperture in a minimum amount of time. A scoop-loader was then used to close the gap and fill in over the culvert. The 290 then packed the area and the crew was able to successfully complete the operation in one day, yet having maximum security at night.

6. 500 KW MCA Generator Air Filters:

a. Observation: Once the original set of air filters for the MCA 500 KW generator became so clogged that high pressure air would no longer render them serviceable again, it was found that washing and drying the paper filter took four to five days.

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b. Evaluation: Replacement filters were not available within the MCA Supply system and with only one set on hand, an inordinate amount of down time was experienced every three weeks or so when they became clogged. Therefore, an alternate means of air filtration had to be employed until such time as the proper replacement filters could be obtained.

c. Recommendation: One such alternate means is a 290 air cleaner and filter element which may be affixed to the original 500 KW filter box by welding a flange on the 290 air cleaner outlet pipe and having a similar plate made for bolting to the flange from the inside of the 500 KW filter box. In this manner, only four small bolt holes and one 5½ inch air inlet hole need to be cut in the 500 KW filter box, and when the proper filter elements become available again, a simple metal plate may be bolted over the holes which have been cut. The mass flow rate capacity of the 290 filter is more than adequate for this adaption.

7. Application and curing times for Bituminous Prime Coats:

a. Observation: Because this battalion could not obtain the proper types and quantities of cutbacks for its LOC mission, i.e., RC-70 or MC-30 or 70 for priming a tight base and RC-70 for all tack coats, it was necessary to develop substitutes, particularly for prime coats.

b. Evaluation: The only MC products available in quantity in Vietnam were MC and RC-800, both of which have to be heated before a distributor could apply them, and even at 180°, penetration of these products was inadequate and curing time was excessive, i.e., approximately 48 hours. The solution arrived at was to dilute the MC-800 with diesel at the rate of three parts MC-800 to one part diesel to approximately the viscosity of MC-30. The mixture was then heated to 140°F, and the subgrade was primed.

c. Recommendation: This mixture penetrated to 3/8" - 1/2" and cured out within 24 hours and met all requirements for a good prime coat. It was not as traffic resistant as plain MC-800, but if base coarse were laid within two to three days, the diluted mixture was satisfactory. Therefore, in the absence of the proper prime coat material, a diesel diluted MC-800 is an adequate substitute.

D. Organization: None

E. Training: None

F. Logistics: None

G. Communications: None

H. Materiel: None

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I. Other:

1. "Tool Box" Safety Program:

a. Observation: The "Tool Box" safety briefings have been given in the battalion since August 1969, but it was discovered that the program needed more definition and direction, also the available information aids were not being utilized to the fullest extent.

b. Evaluation: The problems that confronted the "Tool Box" program were two fold: First, there was a need to positively insure that meaningful safety topics and information were being dispensed by qualified personnel; second, all the available information aids were not being fully utilized.

c. Recommendation: The "Tool Box" briefings are now planned and scheduled a week in advance and a weekly safety briefing report is now submitted to the battalion commander. This report outlines the subject matter, instructor, number of personnel present, location of briefings, chapter and paragraph of reference material utilized, and whether the company commander was in attendance. Major emphasis has been placed on using the safety manual, EM 385-1-1, Maintenance Bulletins, and recent accidents as aids for lessons learned. In setting up these guides and aids, the program has been given a basic structure and the degree of uniformity needed to co-ordinate the program, but still allows each unit to select safety topics that are pertinent to its mission.

2. Accidents involving the .45 caliber pistol:

a. Observation: During the report period there were three accidents involving the .45 caliber pistol. The incidents ranged from a man performing normal guard duty, casual carrying of the weapon, to an accident occurring while in the process of cleaning the weapon.

b. Evaluation: The first accident prompted a complete review of the battalion weapons policy, number of .45's authorized, number on hand, etc. The old battalion policy permitted men to carry this weapon as long as it was registered through company supply, and issued to the individual on hand receipt. By TO&E thirty-seven such weapons were authorized; however, the liberal policy has resulted in an excessive number of .45's in the hands of untrained and inexperienced troops.

c. Recommendation: Reduce the number of .45's to twenty-six and forbid any man in a line company to carry the weapon except the company commander. On the staff, only the principal staff officers are armed with this weapon. Enlisted persons authorized the .45 include only the battalion sergeant major, selected medics, surveyors, and high voltage wireman.

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AS

James C. Donovan
JAMES C. DONOVAN
LTC, CE
Commanding

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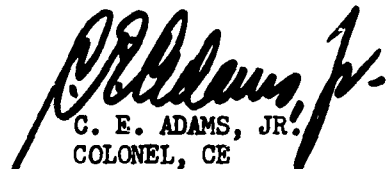
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SUBJECT: Operational Report-Lessons Learned for the 815th Engineer Battalion (Const) for the Period Ending 31 Jan 70, RCS CSFOR- 65 (R2)

DA, HEADQUARTERS, 937TH ENGINEER GROUP (COMBAT), APO 96318, 25 February 1970

TO: Commanding General, 18th Engineer Brigade, ATTN: AVPC-OP, APO 96377

1. The ORLL from the 815th Engr Bn (Const) for the period ending 31 Jan 70 is forwarded IAW USARV Reg 525-15.
2. The fact that APO's were missing on two of the addressees has been brought to the attention of the Bn for future correction.
3. Section 1, para 6a, MCA Equipment: Both Brigade and Group Aviation assets are utilized to transport MCA parts in order to speed repairs. Close liaison is maintained between Group and Brigade Maintenance Officers.
4. Para 6, TONE Equipment: The 815th picked up 8 new 5-ton dump trucks on 23 Feb 70. In addition, 15 MCA Dump trucks were obtained from the 35th Engr Gp and 8 MCA dump trucks were transferred from the 84th Engr Bn (Const) to the 815th. New 10-tons have arrived in country; however, they may have to be turned over to the ARVN.
5. Para 7, Materials: Materials for some critical projects have been obtained from other Group and Special Forces. Items such as plumbing and electrical materials continue to be a problem.
6. Para 8: The psyops program conducted along with the construction of QL-14N is especially noteworthy and has done much to cement relations between the local nationals and the US Army Engineers.
7. Section II, para 6, 500 KW Generator: This problem was partially alleviated by relocating the generator to a less dusty area. The lack of spare filters was a considerable problem for some time and held up construction on QL-14 North. The dependence of the MCA 250 TPH Crusher on a single 500 KW Generator is a disadvantage. Consideration of 3 ea 250 KW generators for this crusher is desirable.


C. E. ADAMS, JR.
COLONEL, CE
Commanding

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AVBC-OP (31 Jan 70) 2nd Ind

SUBJECT: Operational Report - Lessons Learned, 815th Engineer Battalion
(Construction), Period Ending 31 Jan 70, RCS CSFOR-65 (R2)

DA, HEADQUARTERS, 18TH ENGINEER BRIGADE, APO 96377 21 MAR 1970

TO: Commanding General, U.S. Army Vietnam, ATTN: AVHGC-DST, APO 96375


1. This Headquarters has reviewed the Operational Report - Lessons Learned for the 815th Engineer Battalion (Construction), as indorsed by the 937th Engineer Group (Combat). The report is considered to be an accurate account of the Battalion's activities during the reporting period.

2. This Headquarters concurs with the observations and recommendations of the Battalion and Group Commanders, with the following comments added:

a. Reference Section 1, paragraph 6a. MCA parts are shipped via organic aircraft whenever possible. Large parts must be shipped through the Air Force. However, convoy shipment is the most reliable method of transporting parts.

b. Reference Section 1, paragraph 6c. On 15 Feb 70, a new Lead Foreman was assigned at Pleiku; management effectiveness of this position has improved since that date.

c. Reference 1st Ind, paragraph 7. Non-concur. The use of three 250 kw generators is not a satisfactory solution to the problem of generator down time. The MCA 250 TPH crusher is designed specifically for hookup with the 500 kw generator. Use of multiple 250 kw generators would require different wiring and controls. In addition, the provision of backup equipment at each site is economically untenable. The present deployment of such equipment is based upon implementation of a responsive supply system and an effective maintenance program.


H. B. COFFMAN, JR.
Colonel, CE
Acting Commander

CF:

1 - CO, 937th Engr Gp

1 - CO, 815th Engr Bn

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AVHGC-DST (31 January 1970) 3d Ind
SUBJECT: Operational Report - Lessons Learned for the 815th Engineer
Battalion (Construction), Period Ending 31 January 1970, RCS
CSFOR - 65 (R2)

Headquarters, United States Army, Vietnam, APO San Francisco 96375 5 APR 1970

TO: Commander in Chief, United States Army, Pacific, ATTN: GPOP-DT,
APO 96558

1. This headquarters has reviewed the Operational Report-Lessons Learned for the quarterly period ending 31 January 1970 from Headquarters, 815th Engineer Battalion (Construction) and concurs with the comments of indorsing headquarters.
2. Reference item concerning "MCA Equipment Parts", page 6, paragraph 6a: concur. Headquarters, USARV and Contractors have initiated a joint program to expedite parts for MCA equipment.

FOR THE COMMANDER:


C. E. MICHELS
MAJ, AGC
Assistant Adjutant General

Cy furn:
815th Engr Bn
18th Engr Bde

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GPOP-DT (31 Jan 70) 4th Ind
SUBJECT: Operational Report of HQ, 815th Engineer Battalion (Construction)
for Period Ending 31 January 1970, RCS CSFOR-65 (R2)

HQ, US Army, Pacific, APO San Francisco 96558 8 APR 70

TO: Assistant Chief of Staff for Force Development, Department of the
Army, Washington, D. C. 20310

This headquarters concurs in subject report as indorsed.

FOR THE COMMANDER IN CHIEF:

D.D. Cline

D.D. CLINE
2LT, AGC
Asst AG

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